

Table G-3: 2000 CH₄ Emissions from Petroleum Refining

Activity/Equipment	Emission		Activity		Emissions (Bcf/yr)
	Factor	Units	Factor	Units	
Vented Emissions					
Tanks	20.6	scfCH ₄ /Mbbbl	1,938	Mbbbl/cd heavy crude feed	0.015
System Blowdowns	137	scfCH ₄ /Mbbbl	15,108	Mbbbl/cd refinery feed	0.754
Asphalt Blowing	2,555	scfCH ₄ /Mbbbl	527	Mbbbl/cd production	0.491
Fugitive Emissions					
Fuel Gas System	439	McfCH ₄ /refinery/yr	158	Refineries	0.069
Floating Roof Tanks	587	scf CH ₄ /floating roof tank/yr.	767	No. of floating roof tanks	0.000
Wastewater Treating	1.88	scfCH ₄ /Mbbbl	15,108	Mbbbl/cd refinery feed	0.010
Cooling Towers	2.36	scfCH ₄ /Mbbbl	15,108	Mbbbl/cd refinery feed	0.013
Combustion Emissions					
Atmospheric Distillation	3.61	scfCH ₄ /Mbbbl	15,108	Mbbbl/cd refinery feed	0.020
Vacuum Distillation	3.61	scfCH ₄ /Mbbbl	6,916	Mbbbl/cd feed	0.009
Thermal Operations	6.02	scfCH ₄ /Mbbbl	2,004	Mbbbl/cd feed	0.004
Catalytic Cracking	5.17	scfCH ₄ /Mbbbl	5,175	Mbbbl/cd feed	0.010
Catalytic Reforming	7.22	scfCH ₄ /Mbbbl	3,296	Mbbbl/cd feed	0.009
Catalytic Hydrocracking	7.22	scfCH ₄ /Mbbbl	1,334	Mbbbl/cd feed	0.004
Hydrotreating	2.17	scfCH ₄ /Mbbbl	1,591	Mbbbl/cd feed	0.001
Hydrotreating	6.50	scfCH ₄ /Mbbbl	8,462	Mbbbl/cd feed	0.020
Alkylation/Polymerization	12.6	scfCH ₄ /Mbbbl	1,147	Mbbbl/cd feed	0.005
Aromatics/Isomeration	1.80	scfCH ₄ /Mbbbl	929	Mbbbl/cd feed	0.001
Lube Oil Processing	0.00	scfCH ₄ /Mbbbl	163	Mbbbl/cd feed	0.000
Engines	0.006	scfCH ₄ /hp-hr	1,467	MMhp-hr/yr	0.008
Flares	0.189	scfCH ₄ /Mbbbl	15,108	Mbbbl/cd refinery feed	0.001
Total					1.445